

CLAIMS:

1. A metallic tube portion (10), produced from a single-piece tube, for a tube coil, which tube portion includes at least two tube bends (11, 12).
2. The tube portion as claimed in claim 1, characterized in that the longitudinal axis (A) of individual subsections of the tube portion (10) does not run in one plane between two ends of the tube portion (10).
3. The tube portion as claimed in claim 1 or 2, characterized in that the ratio of bending radius to tube diameter of a tube bend (11, 12), at least in sections, is less than 1.5.
4. The tube portion as claimed in claim 3, characterized in that the ratio of bending radius to tube diameter of a tube bend (11, 12), at least in sections, is less than 1.1, in particular less than or equal to 1.04.
5. The tube portion as claimed in one of claims 1 to 4, characterized in that the intermediate length between two tube bends is less than 300 mm.
6. The tube portion as claimed in claim 5, characterized in that the intermediate length between two tube bends is less than or equal to 40 mm.
7. The tube portion as claimed in one of claims 1 to 6, characterized in that the tube portion (10) consists of one of the DIN EN 10027 part 1 materials
GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25,
GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4,
GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW,
GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25,
GX55NiCrWZr33-30-04.

8. The tube portion as claimed in one of claims 1 to 7, characterized in that the tube portion (10) has a substantially constant wall thickness.
9. The tube portion as claimed in claim 8, characterized in that the wall thickness of the entire tube portion (10) is between 6 mm and 14 mm.
10. The tube portion as claimed in one of claims 1 to 9, characterized in that the inner surface of the tube portion (10), at least in sections, has a roughness of less than 12 R_a .
11. The tube portion as claimed in claim 10, characterized in that the inner surface of the tube portion, at least in sections, has a roughness of less than 3.2 R_a .
12. A tube coil for a chemical plant, which is assembled from tubes connected to one another by at least one tube portion, characterized by at least one tube portion (10) as claimed in one of claims 1 to 11 connected to one of the tubes (13, 14) at least at one of its ends.
13. The tube coil as claimed in claim 12, characterized in that the tube portion, at least at one of its ends, is connected to a tube (13, 14) or tube portions which is/are produced from the same material.
14. A process for producing the tube portion as claimed in one of claims 1 to 11 or the tube coil as claimed in claim 12 or 13, characterized in that the tube portion (10) is produced from a centrifugally cast tube.
15. The process as claimed in claim 14, characterized in that the centrifugally cast tube is deformed by inductive bending.

16. The process as claimed in claim 15, characterized in that the centrifugally cast tube is heat-treated prior to the inductive bending.
17. The process as claimed in claim 16, characterized in that the centrifugally cast tube is subjected to a heat treatment at a temperature of 800°C to 1200°C prior to the inductive bending operation.
18. The use of the tube portion as claimed in one of claims 1 to 11 as a fitting substitute for tube coils with fittings.
19. The use of the tube portion as claimed in one of claims 1 to 11 or of the tube coil as claimed in claim 12 or 13 in a cracker.